

## CLAIMS

1        Process for controlling electromagnetic relays (2) comprising at least one contact,  
controlled by a voltage or current supply (1), characterised in that the control is modulated  
5        according to the voltage or current supply and to the contacting voltage which is sufficient to  
close the contact of the relay (2), and is modulated according to the voltage or current supply  
and to the maintaining voltage which is sufficient to maintain this closure.

2        Device (10) for controlling electromagnetic relays (2) from a voltage source (1)  
10        implementing the process of claim 1, characterised in that it has a module (12) for adapting the  
power supply of the relay and a control module (11) to control the power supply-adapting  
module.

3        Device as claimed in claim 2, wherein the control module (11) has means (112) to  
15        control the duration of operation of the power supply-adapting module (12) during contacting of  
the contacts, a duration at the end of which it must control the maintaining of the contacts.

4        Device as claimed in one of claims 2 and 3, wherein the control module (11) has a  
module (111) for detecting micro power cuts.

5        Device as claimed in one of claims 2 to 4, comprising an oscillator (13) connected to the  
power supply-adapting module (12), which comprises a calculation means (123) and a means  
(122) for pulse duration modulation (MID) of the supply voltage.

6        Device as claimed in one of claims 2 to 5, comprising a memory (113) storing the  
characteristics of the relay (2).

7        Specific integrated circuit (ASIC) comprising at least one pulse duration modulation  
means (122), the modulation means (122) being controlled by a control-command unit (3)  
30        programmed for modulating the power supply of at least one electromagnetic relay 2 according  
to the process of claim 1.

8        Circuit as claimed in claim 7, characterised in that it further comprises a circuit (DMC) for detecting micro power cuts.

5    9        Circuit as claimed in claim 8, wherein the micro power cut detector circuit, upon occurrence of a micro power cut, controls a contacting voltage on the relays with controlled maintaining voltage.